

### **AMENDMENTS TO THE CLAIMS**

1. (Previously presented): A method for fabricating a hollow diamond shell with geometrical shape, comprising:

preparing a matrix with a geometrical shape;

pretreating the matrix by using diamond powder agents in an ultra-sonic bath to incite nucleation of diamond on the matrix while blocking a zone on the surface of the matrix from the diamond powder agents;

synthesizing a diamond film on the matrix by CVD process to form a diamond/matrix composite, said composite being partially uncoated with the diamond film to have an opening site corresponding to the zone; and

etching the matrix of the composite partially uncoated with the diamond film through the opening site to obtain a hollow diamond shell.

2. (Previously presented): The method of claim 1, wherein the size of the matrix is in the range between 200 nm and 2 mm in the longest length.

3. (Original): The method of claim 1, further comprising the step of applying vibrations to a plate on which the matrix is placed, to let the matrix move and rotate.

4. (Previously presented): The method of claim 1, wherein the matrix has a spherical shape.

5. (Previously presented): The method of claim 1, wherein an opening on the matrix is formed by attaching glue tapes during the pretreatment.

6. (Previously presented): The method of claim 1, wherein the diamond film formed on the matrix has a (100) prevailing surface or nanocrystalline morphology.

7. (Original): A hollow diamond shell with a geometrical figure fabricated by the method of claim 1.

8. (Withdrawn): A method for fabricating diamond particles, comprising:
- preparing a matrix with a geometrical shape;
  - synthesizing diamond particles on the matrix by CVD process to form a diamond/matrix composite and then stopping the diamond deposition before film formation; and
  - etching the matrix to obtain the diamond particles.
9. (Withdrawn): The method of claim 8, wherein each size of the diamond particles is in the range between 10 nm and 100  $\mu\text{m}$ .